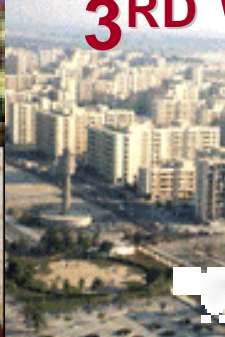


# 3<sup>RD</sup> Weapons of Mass Destruction Civil Support Team



NOT IF BUT WHEN



# **3<sup>rd</sup> Civil Support Team**

## **Weapons of Mass Destruction**

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**LTC XAVIER STEWART**  
**COMMANDER**

**MAJ JEFF HICE**  
**DEPUTY COMMANDER**

**CPT GILBERT DURAND**  
**OPERATIONS OFFICER**

**SMSGT RUSSELL FLICK**  
**SENIOR NCOIC/1st SGT**

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**PENNSYLVANIA NATIONAL GUARD**

# PURPOSE

To inform Federal, State and local Responders and Civil Authorities, and Military Personnel on the mission, composition and capabilities of the 3rd Weapons of Mass Destruction Civil Support Team

3<sup>rd</sup> Civil Support Team  
Weapons of Mass Destruction



# Outline

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- Mission
- Background/ CST Concept
- Composition
  - Personnel
  - Training
  - Equipment
- Capabilities
  - Detection
  - Decontamination
  - Reach-back
  - Hazard Modeling
  - Medical Treatment
- Summary, Questions, Conclusion

3<sup>rd</sup> Civil Support Team  
Weapons of Mass Destruction



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# The CST MISSION and the WMD RESPONSE CONCEPT

3<sup>rd</sup> Civil Support Team  
Weapons of Mass Destruction



# MISSION

**The WMD Civil Support Team element deploys to an area of operations to:**

**Assess** a suspected nuclear, biological, chemical, or radiological event in support of the local incident commander (IC)

**Advise** civilian responders regarding appropriate actions

**Assist** requests for assistance to expedite arrival of additional state and federal assets to help save lives, prevent human suffering, and mitigate reduction of property damage

3<sup>rd</sup> Civil Support Team  
Weapons of Mass Destruction



# WMD Civil Support Team History

**FY 1998: 10 original CSTs Established ('96 Nunn-Lugar-Domenici and PDD 39)**

**FY 2000: 17 Additional CSTs Established**

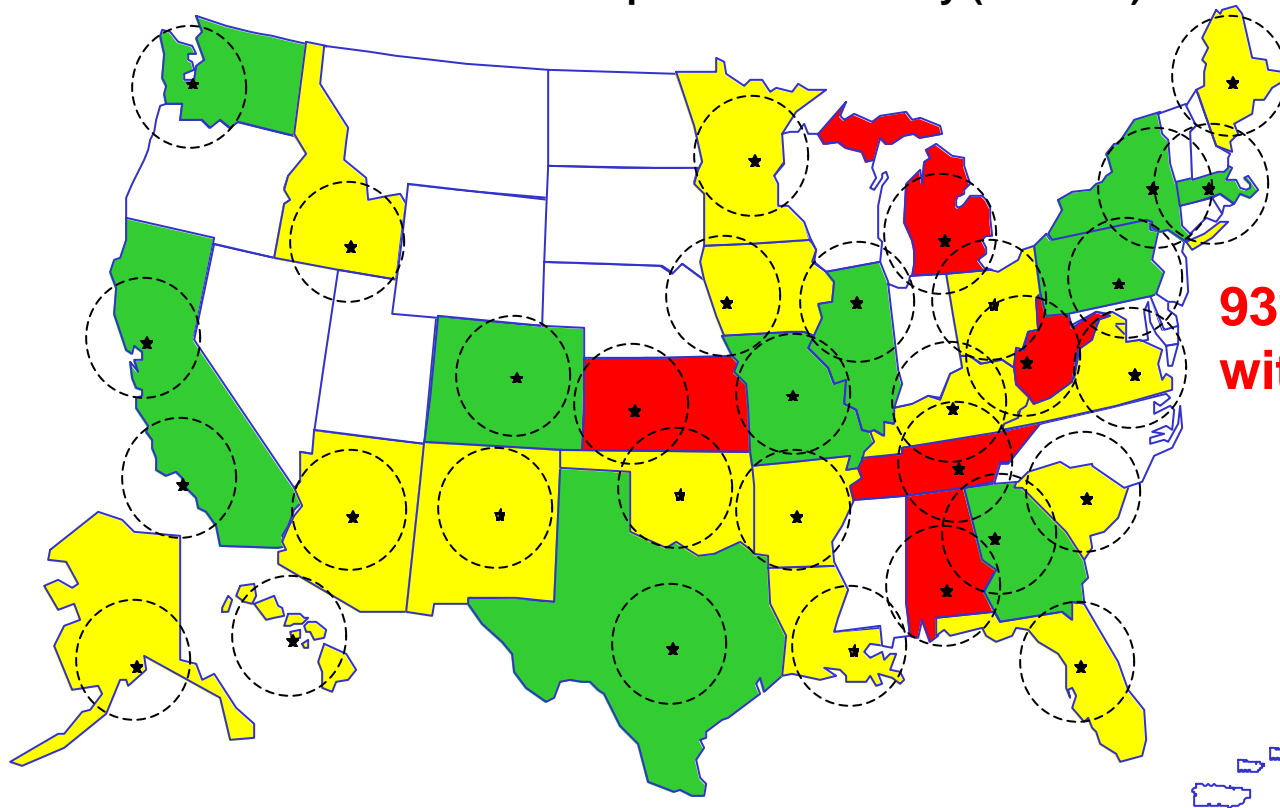
**FY 2001: 5 additional CSTs Selected**

**Today: 32 Civil Support Teams are stationed in 31 States (CA has 2 CSTs)**

**24 Civil Support Teams are now SECDEF certified to perform their mission**

**3 CSTs will be certified in next 3 months, 5 additional CSTs certified in early FY 03**

**FY 2002: Bill to establish 1 CST per State/ Territory (HR 3154)**



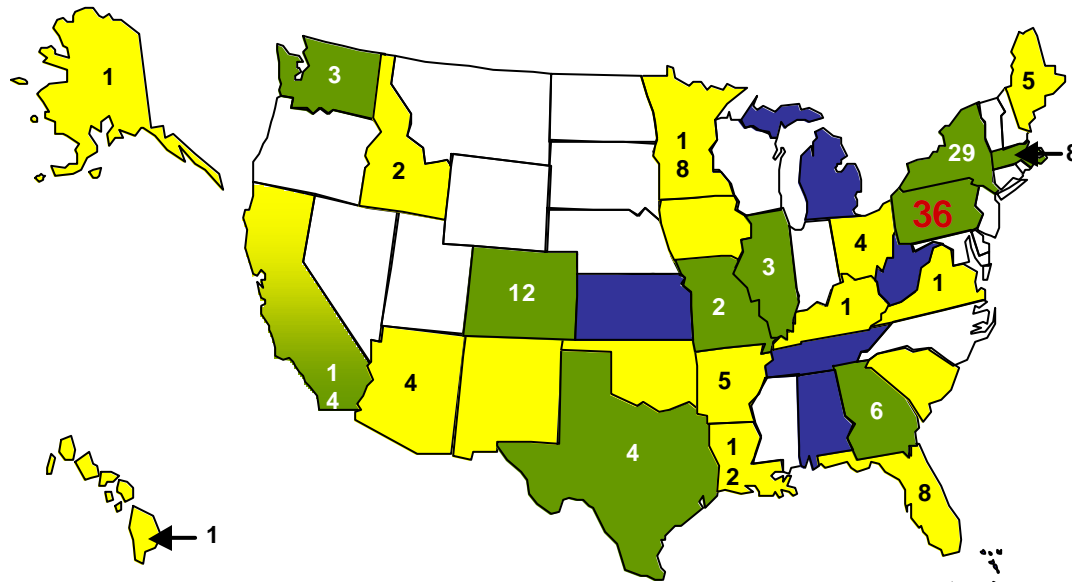
**93% of U.S. Population is within 250 Miles of a CST**

# Mission, Organization and Deployments

On order the 3<sup>rd</sup> WMD Civil Support Team deploy to support civil authorities at a domestic Chemical, Biological, Radiological incident site. The unit provides support by identifying CBR agents, **Assessing** the current and projected consequences, **Advising** on response measures, and **Assist** with appropriate requests for additional support to help save lives, prevent human suffering and mitigate great property damage.

**24/7 ability to deploy an Advance Party within 90 minutes and the full CST capabilities within 3 hours**

WMD CST Operational Responses 19 SEP 01 - 4 FEB 02



**Total of 175 CST Responses nationwide since 9/11**

**3rd WMD CST is the most frequently deployed CST in the Nation**

**CSTs are:**

**Federally Funded, Trained and Certified**

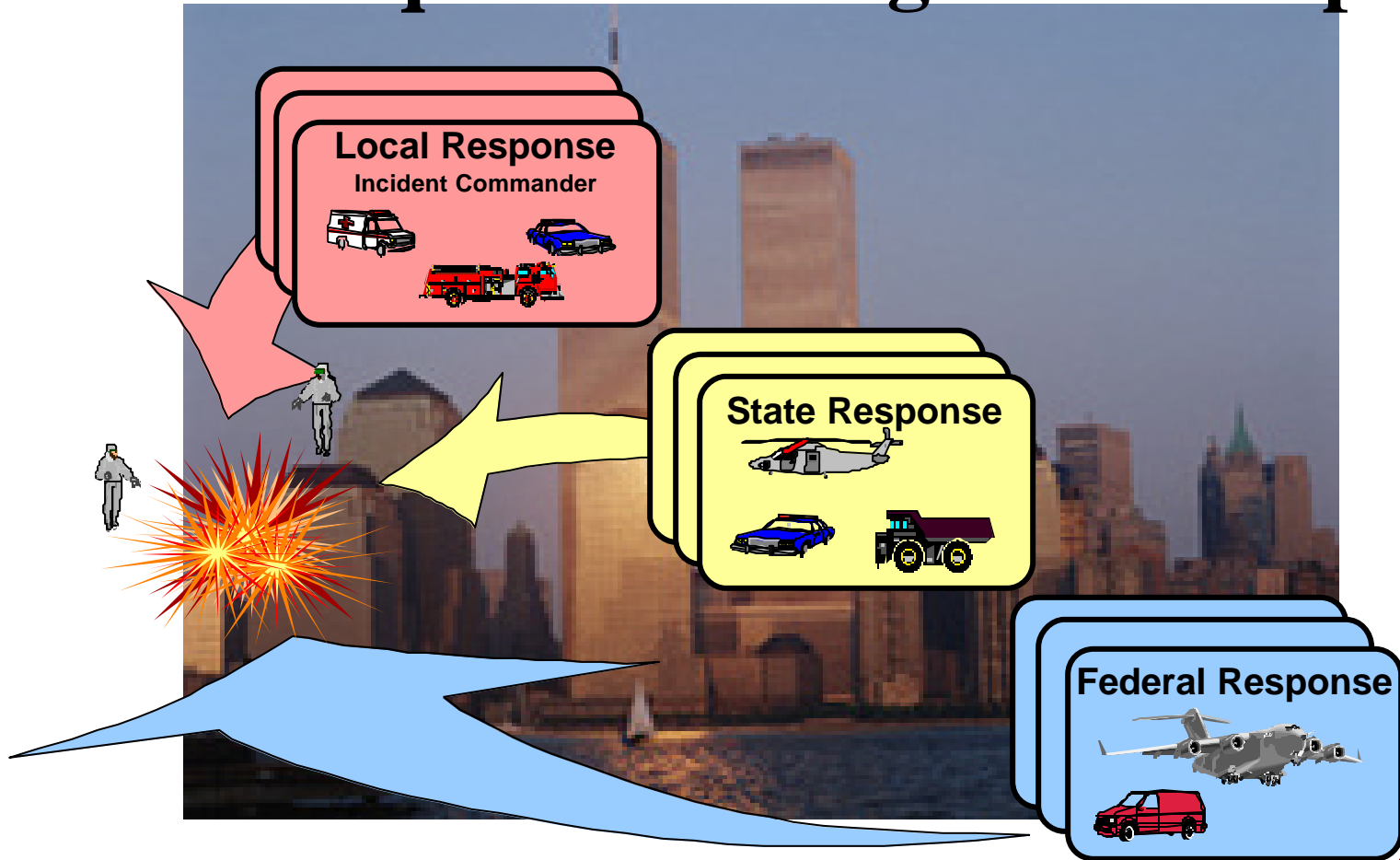
**State Controlled under the Command of the Governor**

**Composition:**

**22 Full Time Personnel**

**Army and Air National Guard**

# Consequence Management Response



- Full response requires local, state, and federal assets
- State response includes National Guard
- Military support requires Total Force involvement

3<sup>rd</sup> Civil Support Team  
Weapons of Mass Destruction





# COMPOSITION of the WMD CST Personnel and Training

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Weapons of Mass Destruction

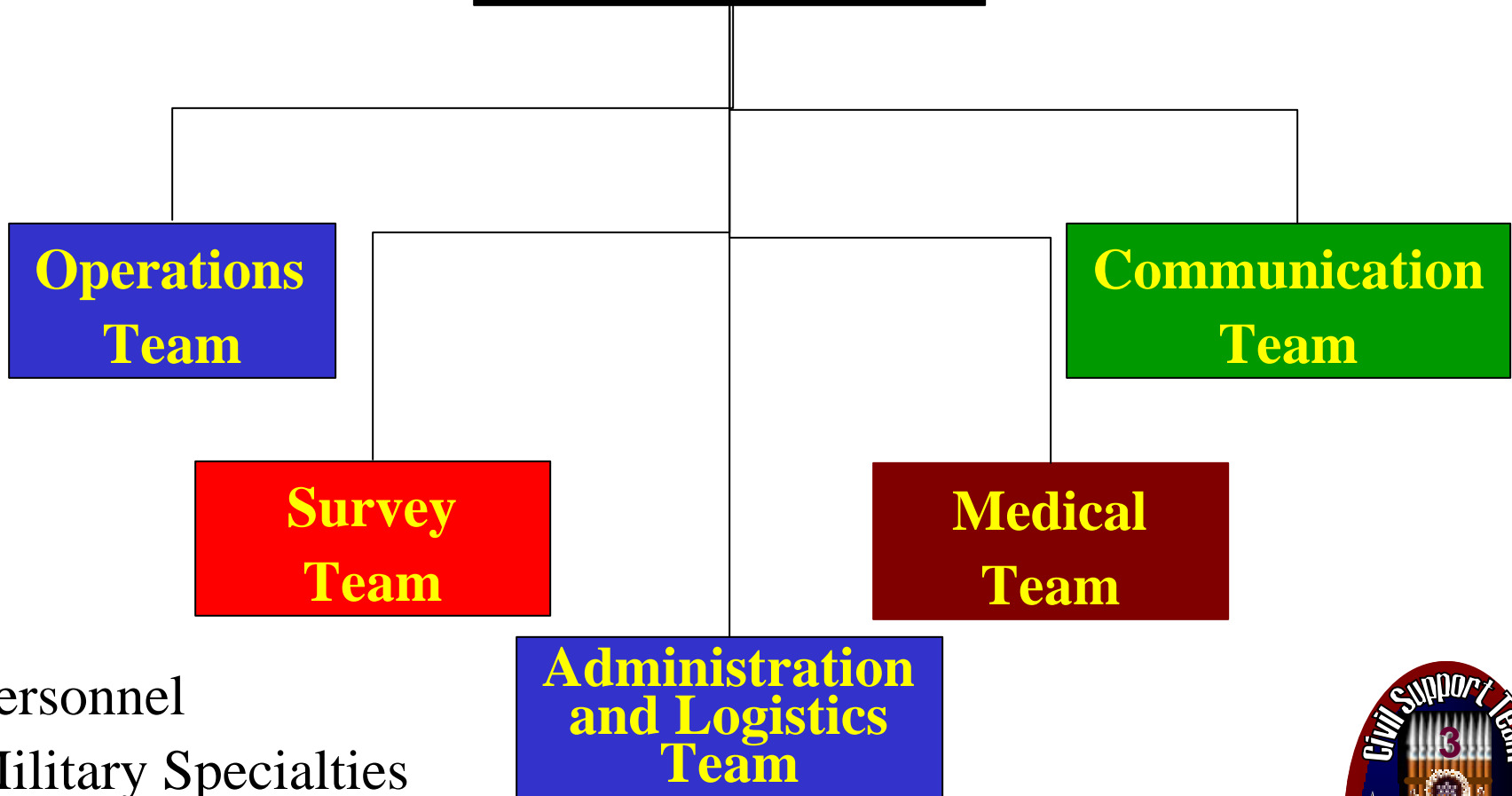


# CST COMPOSITION

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Personnel (1 of 2)

**Command Group**



22 Personnel  
15 Military Specialties

3<sup>rd</sup> Civil Support Team  
Weapons of Mass Destruction

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# CST COMPOSITION

## Personnel (2 of 2)

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### Command Team

Unit Commander (O-5\LTC)

Deputy- Commander (O-4\MAJ)

### Operations Team

Operations Officer (O-3\CPT)

Senior Operations NCO (E-8\MSG)

Operations NCO\Modeler (E-7\SFC)

Assistant Operations NCO (E-6\SSG)

### Survey Team

Survey Team Leader (O-3\CPT)

Survey Team NCO (E-7\SFC)

2 - Reconnaissance NCOs (E-6\SSG)

4 - Assistant Reconnaissance NCOs (E-5\SGT)

### Medical Team

Physicians Assistant (O-4\MAJ)

Medical Operations Officer (O-3\CPT)

Nuclear Medical Science Officer (O-3\CPT)

Medical NCO (E-7\SFC)

### Communications Team

Communications Team Chief (E-7\SFC)

Information Systems Operator (E-6\SSG)

### Admin\Log Team

Logistics Team Chief (E-7\SFC)

Administrative NCO (E-5\SGT)

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Weapons of Mass Destruction



# CST Training

## Training (1 of 2)

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- Over 1,800 hours of WMD-related training in 18 months
- Trained by FEMA, NFA, EPA, DOD, FBI, DOE, and US Army Chemical School
- HAZMAT certification (over 400 hrs HAZMAT training)
- Radiological and Nuclear incident response training
- Terrorism and Weapons of Mass Destruction
- Emergency Response and Consequence Management
- National Registered EMT

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# CST COMPOSITION

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## Training (2 of 2)

In addition to WMD Training, 3rd WMD Civil Support Team (WMD) personnel have a myriad of skills, including:

- Chemical Officer and NCO's
- Medical and Nuclear Medical Officers
- Explosive Ordinance Disposal (EOD) expert
- Communications and Computer specialists
- Medical Professionals (PA & Respiratory Therapist)
- Firefighters, EMT's and Paramedics
- Military Police, Military Intelligence
- College Professors / Graduate Degrees (Ph.D./ MA)
- Military Support to Civil Authorities

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Weapons of Mass Destruction

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# COMPOSITION of the WMD CST

## *Equipment and Capabilities*

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# CST COMPOSITION

Equipment: Radiological and Biological Detection Equipment

## Biological Detection

- Bioassay Tickets
- Fluorescent Microscopy

## Radiological Detection

- AN PDR 77 RADIAC  
*Set Detects Alpha, Beta, Gamma, X-Ray*
- AN VDR2 RADIAC  
*Detects Beta and Gamma*
- Gamma Spectrometer  
*Detects radiation level and identifies specific isotope*



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# CST COMPOSITION

## Equipment: Chemical Detection Equipment

### Chemical Detection

- **INFICON HAPSITE  
(GC/MS)**

*Identifies 1,000s of chemical substances*

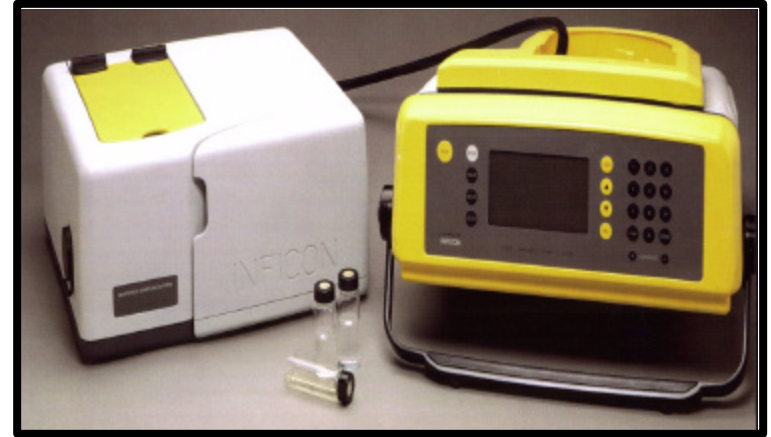
- **DRAEGER  
COLORMETRIC TUBES**

- **MULTIRAE Photo  
Ionization Detector (PID)**  
*Detects VOC, O<sub>2</sub>, H<sub>2</sub>S, CO*

- **APD 2000/ ACADA/ICAM**  
*Detect Nerve & Blister Agents*

- **M256 Kit**

- **M8 Paper**



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Weapons of Mass Destruction

# CST COMPOSITION

## Equipment: Personal Protective Equipment

- Military Issue CPOG
- Kappler Level A & B Protective suits
- Chemical Resistant Undergarments
- Flash Suit Overgarments
- Dragger SCBA
- M40 Mask with PAPR
- UDR 13
- Thermoluminescent Detectors (TLDs)



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Weapons of Mass Destruction



# CST COMPOSITION

## Equipment

### Unified Command Suite (UCS)

- GMC 6500 Low Profile Chassis
- C-130, C-141, C-5, C1-17 Transportable
- 15 KW onboard generator
- Communications Capabilities
  - Military HF/VHF, AM/FM Transceivers
  - HF
  - VHF/UHF Base Station With Repeaters
  - Land Mobile Transceivers
  - INMARSAT B (UHF Voice/Data Satcom)
  - Commercial Ku Band Satcom
  - STE Secure Telephone
  - PC Workstations
  - Routers (Secure & Non-Secure)
  - Printer
  - Radio Remote Units
- Set-Up and Maintained by 2 Personnel
- Fully Operational Within 1.5 Hours of Arrival

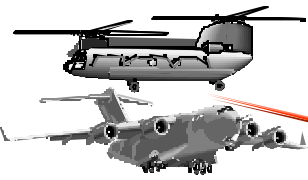




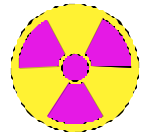
# Cold Zone

# Warm Zone

# Hot Zone



Fire  
EMT  
Police  
Hospital  
Military  
Security

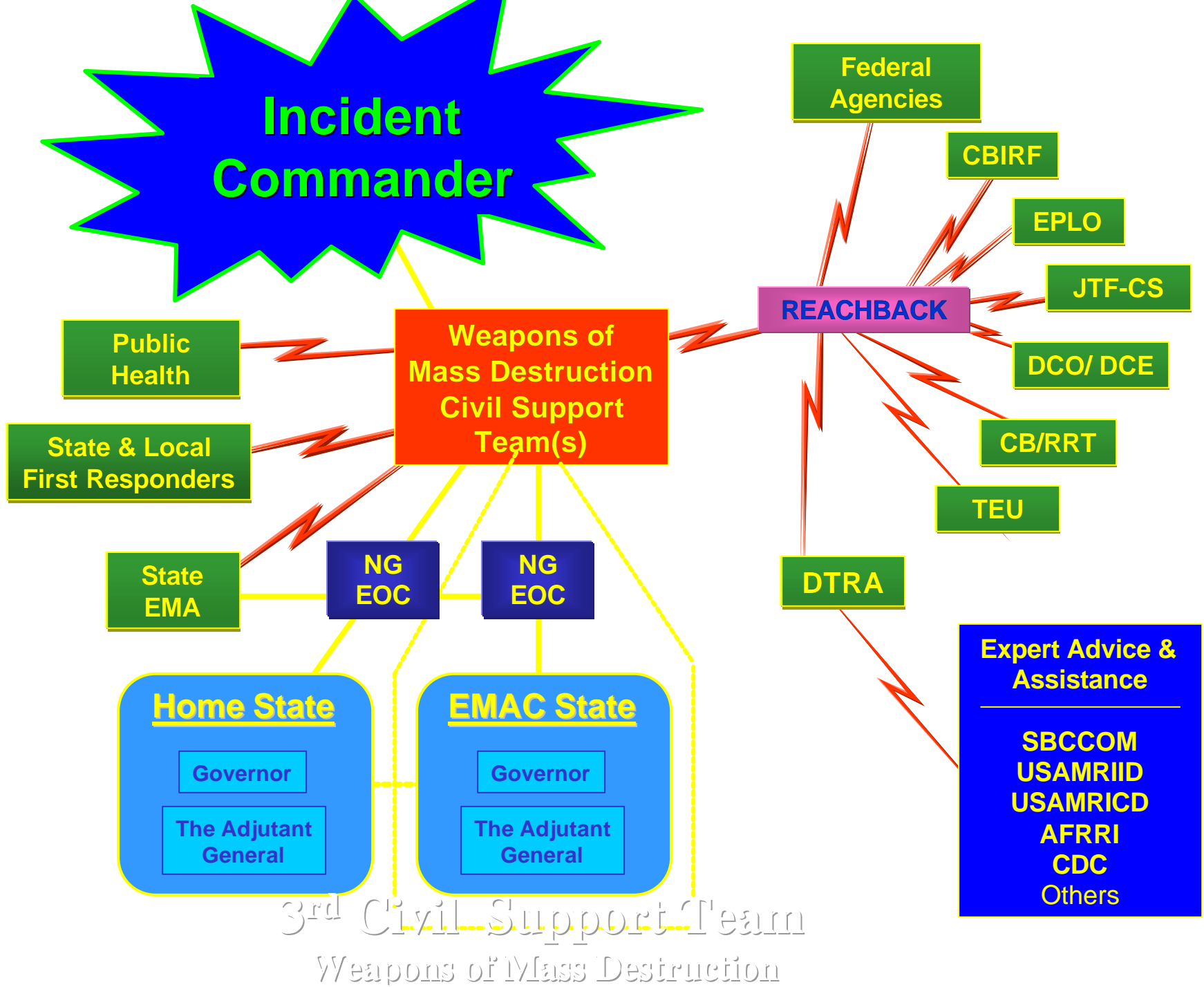


ADP Terminals  
Audio Distribution  
Phone Terminals/Fax  
Video Terminal



Secure / Non-Secure  
Voice  
Data  
Video

Incident JOC  
National Guard  
JTF-CS / DOMS  
State EOC  
FBI  
FEMA



# CST COMPOSITION

## Equipment:

### Mobile Analytical Laboratory System (MALS)

- **HAPSITE system capable of detecting thousands of volatile organic chemicals with Headspace Sampler for liquid samples.**
- **Portable Gamma Spectrometer with Computer based Spectrum analysis system**
- **Digital Photographic Microscope linked to the Reach-back system**
- **Communications Linked to UCS**
- **Sample Analysis Prep-Shelter**
- **Level III Glovebox**

**Staffed by 2 Personnel**

**Operational 1 Hour from arrival**



# ***Mobile Analytical Lab System (MALS)***





# CST COMPOSITION

## Equipment

### Medical Surveillance and Emergency Treatment System

- Contaminated Patient Medical Treatment & Decon Sets
- Advanced & Basic Medical Treatment Aid Bags
- Digital Heat Stress Monitoring System



- Automated Reference Library (Nuclear, Biological, Chemical, and Radiological Information)
- Computer System



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Weapons of Mass Destruction



# CST COMPOSITION

## Emergency Medical Patient Decontamination



# Operational Support Equipment Decontamination Equipment

- Unit Decontamination System
- Automated Reference Library
- Video and Still Digital Cameras



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Weapons of Mass Destruction



# Operational Support Equipment Decontamination Equipment

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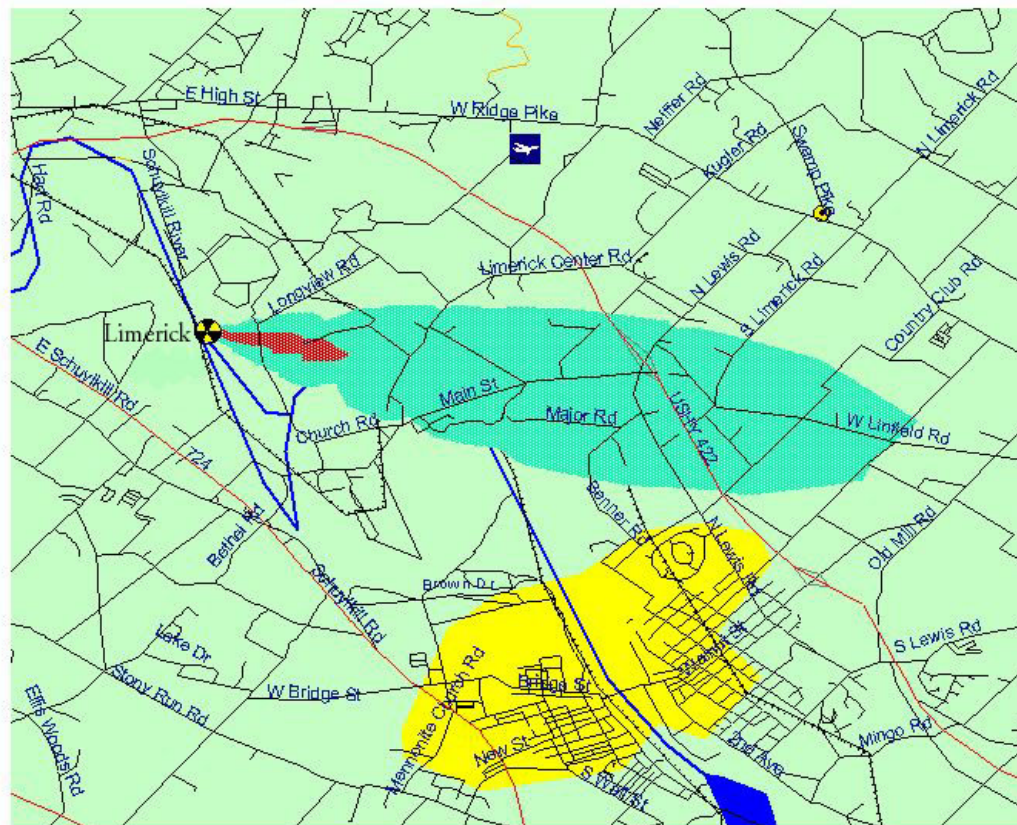
UNCLAS



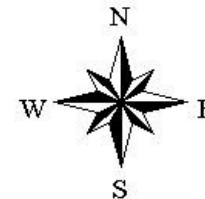
# Operational Support Equipment

## Hazard Plume Modeling

### Limerick Power Generation Station



HPAC: Cobalt3  
 Prob Lethality(fraction)  
 0.0 - 0.1  
 HPAC: Cobalt3  
 Dosage(cGy)  
 0.05  
 pop exp



Weather:

Wind Speed 5 Met/Sec  
 Wind Direction 282 DEG NW  
 Partly cloudy  
 25 deg C



2 0 2 4 Miles

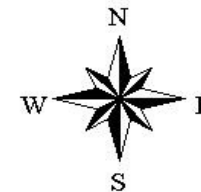
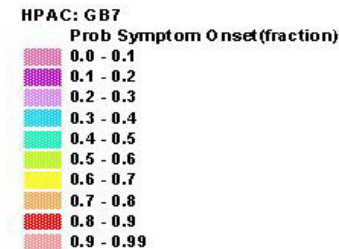
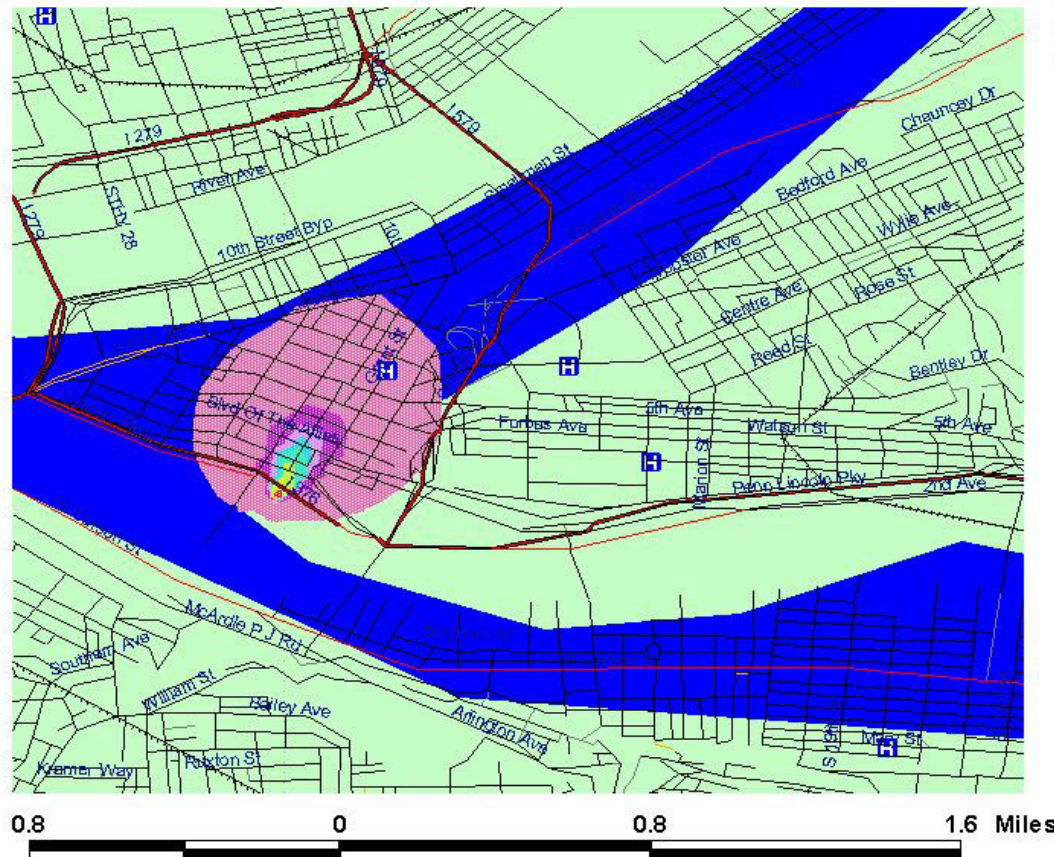
# Operational Support Equipment

## Hazard Plume Modeling

### Pittsburgh sarin (GB)

Weather:  
 Wind speed 8 MET/Sec  
 Wind Direction from 200 deg SW  
 Temp 20 deg C

4 lb of Sarin  
 Released as a small explosion





# Operational Support Equipment

- Tactical Operations Center
- Survey Staging and Rehabilitation Area



3rd WMD CST

**PLAN FOR RESPONSE**



# ASSEMBLY

## DEPLOYMENT TIME GOALS:

**ADVON** (5+ Personnel) is ready to deploy in 1.5 to 2 hours

*This gives the unit partial capability at minimal manning*

**Main Body** (11-15 Personnel) is ready to deploy in 3 to 4 hours *This gives the unit full capability at less than full manning*

**Trail Element** of unit (2-6 Personnel) deploys in over 3 to 4 hours  
*This gives the unit full capability at full manning*

# **11 Person Plan for Response**

- On-call plan centers on division of the 22 person CST into two 11 person response elements with identical capabilities
- Each 11 Person response element rotates between “on call” and “standby” status
- Alternate Work Schedule days off while on Standby
- Team is not normally expected to execute a full response with 11 personnel - this is a management tool that ensures all core competencies are available for response

# A MODEL of Response for the WMD CST



# NOTIFICATION

- **External**: State NG EOC receives and passes notification of a potential WMD Event
- **Internal**: Commander receives independent notification of a potential WMD Event and passes this information to the State NG EOC



# CST EMPLOYMENT CRITERIA

## **FIRST TEST: Is the incident potentially terroristic?**

- Determination that an event is definitely terrorism will be made, after investigation, by the FBI
- There is no requirement that the incident be confirmed as terrorism prior to deployment of the CST
- WMD CST can be used as one tool to rule out, as well as to confirm, terrorism

3<sup>rd</sup> Civil Support Team  
Weapons of Mass Destruction



# CST EMPLOYMENT CRITERIA

**SECOND TEST:** Does the incident appear to involve the possible use of a weapon of mass destruction?

- WMD defined here as a chemical, biological, radiological, nuclear or high-yield explosive (CBRNE)
- Does not have to actually cause mass destruction, issue is potential capability and intended or potential use
- Things that appear only to be a “standard” emergency may, after investigation, in fact be CBRNE
- Standard chemicals can be used as a WMD device



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Weapons of Mass Destruction



# CST EMPLOYMENT CRITERIA

**NOTE: Beyond its WMD Response Mission, the WMD CST could be used by the Governor, within its capabilities, as a tool for consequence management event that is outside of the definition of WMD Terrorism (Example Y2K, HAZMAT)**



# ALERT

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- **Procedure**

**Commander or Duty Officer Initiates Recall Procedures for the Team**

- **Some Issues for MSCA (answers we need)**

**Valid Request for Assistance**

**Predeployment/ Release Authority**

**Situation Information** (limited organic staff)

**Incident POCs** (IC/ State EOC/ DTRA)

**Mode of Travel** (Air/ Ground)

**Uniform** (Military or Alternate)

**Force Protection** (Weapons/ Ammo/ROE)

**External Assets supporting us**

**(MPs, Chaplain, State Police etc..)**

3<sup>rd</sup> Civil Support Team

Weapons of Mass Destruction



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# ASSEMBLY

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## Unit Members Report to Armory

- Individual Response Time to Armory varies (ADVON, Main Body, Trail)
- Allowable Travel Radius for Unit Personnel varies based upon Threatcon

## Unit Initiates Pre-deployment Activities:

- Sign In
- Med Monitoring
- Sensitive Item\ Equipment Draw
- Vehicle Load Out (Majority of Equipment Pre-loaded)
- Situation\ Intel. Gathering
- Mission Planning (abbreviated planning cycle -what is different?)
- Route Planning (Route, alternate route, checkpoints)
- Mission Briefing

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Weapons of Mass Destruction



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# ASSEMBLY

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## DEPLOYMENT TIME GOALS:

In a *No Notice Response* under *Threatcon Normal\ Alpha*

**ADVON** (4-7 Personnel) is ready to deploy in under 2 hours  
*This gives the unit partial capability at minimal manning*

**Main Body** (7-9 Personnel) is ready to deploy in under 4 hours  
*This gives the unit full capability at less than full manning*

**Trail Element** of unit (5-11 Personnel) deploys in 6+ hours  
At higher Threatcons response times decrease and available personnel increase  
*This gives the unit full capability at full manning*

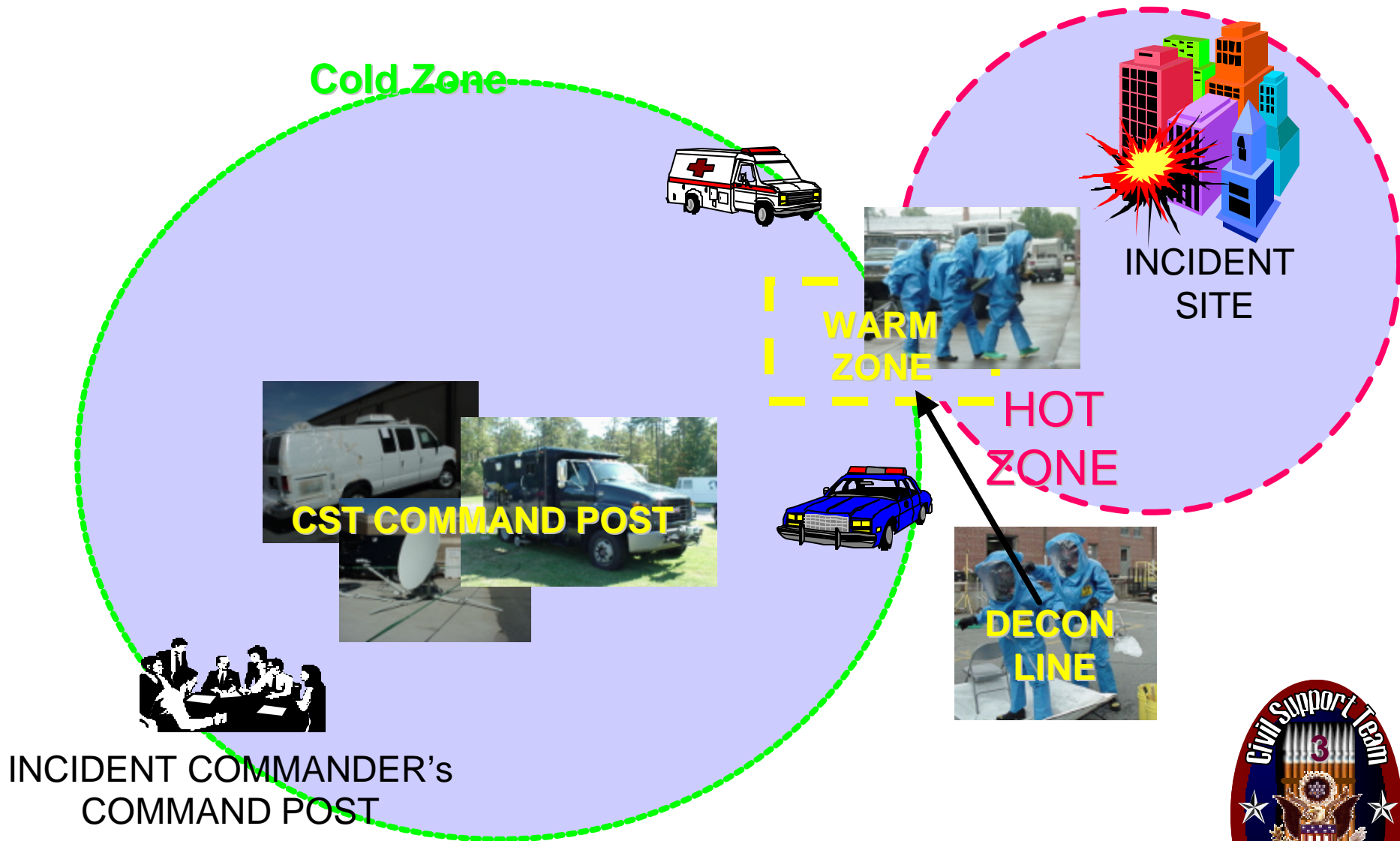
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Weapons of Mass Destruction



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# On Site Architecture

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Weapons of Mass Destruction

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# Incident Site Team Layout





# RESPONSE

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## On Site Activities:

- Site Hazard Survey
- IC Linkup/ Briefing
- Establish Liaison
- ADVON Establishes Operations

*Advise IC*

*ReachBack*

*Hazard Modeling*

*Limited Downrange Survey with local Hazmat Team Augmentation*

- Main Body Arrives and Emplaces

*Priority of Work:*

1. *Establish Decon, Comm, TOC*
2. *Med Monitoring and Survey Dress Out*
3. *Pre-Entry Briefings and initial Entry*

**GOAL: 1st Entry w\in 1 hour of main body arrival**



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Weapons of Mass Destruction



# RESPONSE

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**ONCE IN THE HOT ZONE WE HAVE ONE  
GOAL: TO ACCOMPLISH THE ICs  
OBJECTIVES**

3<sup>rd</sup> Civil Support Team  
Weapons of Mass Destruction



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# Summary

You have been briefed on the  
mission, composition and  
capabilities of the  
3rd Weapons of Mass Destruction  
Civil Support Team

3<sup>rd</sup> Civil Support Team  
Weapons of Mass Destruction



# Questions?

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Weapons of Mass Destruction



# CONCLUSION

The Military and Civilian Leadership of the United States are convinced that terroristic use of weapons of mass destruction is not a case of if, but when.

When a WMD incident occurs, the 3rd WMD CST is trained, equipped and prepared to perform its mission.



3<sup>rd</sup> Civil Support Team  
Weapons of Mass Destruction